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THE DIRECTV GROUP INC			SHELEHEDA, JAMES R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/732,498	<b>Applicant(s)</b> FOOTER ET AL.	
	<b>Examiner</b> James Sheleheda	<b>Art Unit</b> 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1 and 14 are objected to because of the following informalities:

In claim 1, line 32, "256 RAM" fails to sufficiently define the memory size, it appears that it should be changed to --256 MB RAM-- as defined in the specification on page 9, lines 18-19.

In claim 14, line 5, "at least on the application" should be changed to --the at least one application--.

In claim 14, line 20, "storing user customer navigation" should be changed to --storing user navigation--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,857,190) (of record) in view of Travaille et al. (Travaille) (6,067,107) (of record), Leermakers (US2003/0105845A1) (of record) and Gessel et al. (Gessel) (5,889,954).

As to claim 1, Brown discloses a system for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

- at least one application servers (Fig. 1; headend, 22 containing server system, 24; column 4, lines 8-11) including at least one application program (column 4, lines 47-55) where the at least one application program is transmitted to users via at least one broadcast center (wherein the headend is inherently communicating the information with a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

- a broadcast center for communicating one or more application programs (column 4, lines 48-52) with a communications satellite (column 4, lines 41-44);

- a communications satellite (column 4, lines 41-44), where the communications satellite receives transmissions from the at least one broadcast center (column 4, lines 41-45);

- a plurality of satellite dishes that receive the at least one application programs via the communications satellite (wherein satellite dishes are inherently present for the local receivers to receive satellite communications; column 4, lines 41-44), where each satellite dish transmits signals to a integrated receiver/decoder (user interface unit, 26; column 4, lines 12-24);

- at least one graphic user interface (EPG; column 6, lines 45-58) provided for each IRD (user interface unit, 26; column 4, lines 12-24), where the at least one GUI enables users to interact with and input data to the at least one application program

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(column 6, lines 49-52), wherein the IRD includes callback functionality (reporting events to the headend; column 7, lines 1-20) and memory (memory, 36),

a data log (column 7, lines 6-14) of user transactions (column 6, lines 3-8) and navigation activity (column 6, lines 48-52), said data residing in the memory (column 7, lines 5-15);

at least one interactive servers (server system, 24 containing event log manager, 56; column 7, lines 16-25);

at least one interactive data repository (log database, 62) for storing data (column 8, lines 1-6); and

a router in each interactive server (inherently present to route data to the correct database; column 8, lines 42-46 and lines 1-16), where each router includes a router application (wherein the router inherently contains software to control the router).

While Brown discloses memory for storing a data log, I/O ports for sending callbacks, interactive servers which will receive the data and transmit it to the IDRs and wherein the interactive server contains a router, he fails to specifically disclose

flash memory,

modems in the IRD communicating callback functionality with communications servers,

where the interactive server encapsulates data into an appropriate protocol for transmission and includes a 333 MHz CPU or greater and 256 MB RAM or greater, and wherein the router application is written in Unix C.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column 7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to transmit user data (paragraph 27), for the typical benefit of providing a upstream path for a client to transmit user data (paragraph 27), which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

Furthermore, in an analogous art, Gessel discloses a network manager of a communications system (Fig. 1) wherein data is encapsulated in TCP/IP protocol before transmission (column 4, lines 30-38) for the benefit of allowing different host processors using different formats to communicate (column 4, lines 38-45).

Also, the examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant to utilize any commonly available CPU and RAM in a computer server (such as a 333 MHz or greater CPU and 256 MB RAM or greater)

for the typical benefit of utilizing commonly available computer components to perform any and all required operations in a computer server.

Finally, the examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant to utilize the well known Unix operating system to write a computer application for the typical benefit of implementing a computer system which is compatible with a common and widely used computer language.

It would have been obvious to modify Brown's system to include the use of flash memory, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television applications.

Additionally, it would have been obvious to modify Brown and Travaille's system to include modems in the IRD in electronic communication with communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream receiver and ensuring those signals are correctly received and communicated.

Furthermore, it would have been obvious to modify Brown, Travaille and Leermakers' system to include encapsulating the data into an appropriate protocol for transmission, as taught by Gessel, for the benefit of ensuring that transmitted data is sent in a protocol which is usable by the system receiving the data.

Also, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille, Leermakers and Gessel's system to

utilize any commonly available CPU and RAM in a computer server (such as a 333 MHz or greater CPU and 256 MB RAM or greater) for the typical benefit of utilizing commonly available computer components to perform any and all required operations in a computer server.

Also, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille, Leermakers and Gessel's system to utilize the well known Unix operating system to write a computer application for the typical benefit of implementing a computer system which is compatible with a common and widely used computer language.

As to claim 2, Brown, Travaille, Leermakers and Gessel disclose wherein each interactive server (see Brown at Fig. 1; server system, 24) comprises a parser (see Brown at Fig. 1; event log manager, 56) of the data in the data log (see Brown at column 8, lines 17-34) and an encapsulator of data into an appropriate protocol for database users (see Gessel at column 4, lines 30-38),

each interactive server transmitting data to the at least one IDR (see Brown at Fig. 1; log database, 62), and each IDR stores parsed information (see Brown at column 8, lines 17-34).

As to claim 3, Travaille additionally discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein an IDR database (124) transmits data to an interactive business system (accessing database IBS, 126 using



the transmitted terminal code; column 8, lines 61-64) containing user account information (column 9; lines 39-53) and wherein the data in the IDR database is correlated with data in the IBS (126; column 8, lines 61-64) for the typical benefit of providing a means to identify the subscriber who the sent out the responses (column 8, lines 52-64).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille and Leermakers' system to include wherein each IDR transmits data to an interactive business system, wherein data in the IDR is correlated with data in the IBS, as further taught by Travaille, for the benefit of providing a means to ensure that received interactive television responses are associated with the correct television viewer.

As to claim 4, Brown, Travaille, Leermakers and Gessel disclose wherein the at least one communications server includes a bank of modems (see Leermakers at Fig. 1, modem bank, 39; paragraph 22).

As to claim 5, Brown, Travaille, Leermakers and Gessel disclose wherein the router in each interactive server identifies a particular interactive television action by a code (identifier in a source string; see Brown at column 8, lines 35-45) and routes the code to the appropriate IDR (see Brown at column 8, lines 42-46).

As to claim 6, Brown, Travaille, Leermakers and Gessel disclose wherein the at least one application program includes a banking application (banking services; see Brown at column 4, lines 48-52).

As to claim 7, Brown, Travaille, Leermakers and Gessel disclose wherein the at least one application program provides data to a user (EPG information; see Brown at column 4, lines 48-52).

As to claim 8, while Brown, Travaille, Leermakers and Gessel disclose wherein the at least one interactive server encapsulates the data regarding a particular interactive television action into TCP/IP protocol (see Gessel at column 4, lines 30-38).

As to claim 9, Brown, Travaille, Leermakers and Gessel disclose wherein each communication server, interactive server, and IDR are located at the same operating company (wherein they are all contained within the central facility; see Brown at Fig. 1, server system 24 and log database, 62 in headend, 22; and Leermakers at Fig. 1, modem bank, 39 in Network Control Center, 30).

As to claim 10, Brown, Travaille, Leermakers and Gessel disclose wherein each communication server, interactive server, IDR and IBS are located at the same operating company (wherein the communication server, interactive server and IDR are all contained within the central facility; see Brown at Fig. 1, server system 24 and log

database, 62 in headend, 22; and Leermakers at Fig. 1, modem bank, 39 in Network Control Center, 30; and wherein the IBS is associated with the broadcaster and contains the billing information; see Travaille at column 8, lines 58-67).

As to claim 11, Brown, Travaille, Leermakers and Gessel disclose wherein data in each IDR (database, 124 contained within in LDC, 122) is communicated to a central IDR (master data center, 128; see Travaille at Fig. 1; column 9, lines 6-17).

As to claim 13, Brown, Travaille, Leermakers and Gessel disclose wherein a code in the data downloaded from the IRD (a unique terminal response; see Travaille at column 8, lines 52-61) is compared with data in the IBS (database, 126) to allow identification of the user (see Travaille at column 8, lines 58-64).

4. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Travaille, Leermakers and Diwan (6,801,936).

As to claim 14, Brown discloses a method for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

providing at least one application programs (such as banking, EPG and shopping services; column 4, lines 47-55) on application servers (Fig. 1; headend, 22 containing server system, 24; column 4, lines 8-11);

transmitting the at least one application program to a broadcast center (wherein the headend inherently transmits the applications to a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

transmitting the at least one application program from the broadcast center to a communications satellite (a DSS satellite; column 4, lines 41-44 and 58-62);

transmitting the application program from communications satellite to a plurality of satellite dishes (wherein the application is inherently transmitted to individual satellite dishes to enable receipt of the DSS signals; column 4, lines 41-44);

communicating the at least one application program from each satellite dish to at least one integrated receiver/decoders (to allow receipt of the application at the user interface unit, 26; column 4, lines 41-44 and 58-62);

enabling a user to input data (user inputs; column 6, lines 48-52), into the at least one application program received by the IRD via a graphical user interface (an EPG; column 6, lines 45-52);

inputting data into a data log in memory in each IRD (column 7, lines 6-14);

transmitting the data log via call back from each IRD (reporting events to the headend; column 7, lines 1-20) to an interactive server (server system, 24 in the headend; column 7, lines 16-25);

parsing user navigation and transaction data, where the transactions include gaming activity (column 4, lines 1-7), advertising viewed (column 4, lines 1-7 and lines 52) and banking transactions (column 4, lines 48-52), from the data log (wherein the received data is separated for storage in different databases; column 8, lines 5-9); and

storing the user customer navigation and transaction data in at least one interactive data repositories (databases, 62 in the headend; column 8, lines 1-9).

While Brown discloses memory for storing a data log, interactive servers which will receive the data and transmit it to the IDRs and logging user transactions, he fails to specifically disclose the use of flash memory and communications servers for receiving callbacks and wherein user transactions include weather requests.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column 7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to transmit user data (paragraph 27) which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

Furthermore, in an analogous art, Diwan discloses a distribution system (Fig. 1) wherein a user will make a request for a weather report (column 3, lines 28-35) and the weather report will then be transmitted to the user in response to the request (column 3,

lines 22-35). This provides the typical benefits of allowing a user to request and receive useful weather information to plan their day.

It would have been obvious to modify Brown's system to include the use of flash memory, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television applications.

Additionally, it would have been obvious to modify Brown and Travaille's system to include communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream server and ensuring those signals are correctly received and communicated.

Furthermore, it would have been obvious to modify Brown and Travaille and Leermakers' system to include wherein user transactions include weather requests, as taught by Diwan, for the typical benefits of allowing a user to request and receive useful weather information to plan their day.

As to claim 15, Travaille further discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the database containing user responses (124) is in communication with a database (126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (124) is correlated with data in the subscriber information database (126; column 8, lines 61-64) before being transmitted to a central facility (column 9, lines 6-17) for the

typical benefit of providing a means to identify the subscriber who the sent out the responses (column 8, lines 52-64).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Brown, Travaille Leermakers and Diwan's system to include correlating data within the IDR with data within an interactive business system, as further taught by Travaille, for the benefit of providing a means to ensure that received interactive television responses are associated with the correct television viewer.

As to claim 16, Brown, Travaille, Leermakers and Diwan disclose wherein communication of the data in each IDR (database, 124) with the data in the IBS (database, 126) enables an operator of the IBS to identify the user associated with the IDR (by cross referencing the identification code with the subscriber info; see Travaille at column 8, lines 58-66).

As to claim 17, Brown, Travaille, Leermakers and Diwan disclose the step of communicating the data in each IDR (database, 124 contained with LDC, 122) with a central IDR (MDC, 128; see Travaille at Fig. 1; column 9, lines 9-17).

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Travaille, Leermakers and Gessel as applied to claim 11 above, and further in view of Hendricks et al. (Hendricks) (6,052,554) (of record).

As to claim 12, while Brown, Travaille, Leermakers and Gessel disclose communication between the IDR and the central IDR, they fail to specifically disclose wherein the communication is performed by satellite.

In an analogous art, Hendricks discloses a cable television distribution system (Fig. 1; column 5, lines 27-36) wherein satellite is used for communication between an operations center (202) and a cable headend (208; column 5, lines 56-63). The use of satellite provides the common benefit of allowing communication between distant systems without the need for a physical connection.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille, Leermakers and Gessel's system to include wherein communication is performed by satellite, as taught by Hendricks, for the typical benefit of allowing interactive television system elements to communicate information without the need for any physical connections between them.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Further, on page 11 of applicant's response, applicant states that claim 14 was amended to include similar features as recited in amended claim 1.

It is noted that claim 14 does in fact **not** contain the features recited in amended claim 1. Specifically, the limitations of the interactive server including a 333 MHz CPU



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and 256 MB RAM, and a routing application written in Unix C or open TV, are not recited in claim 14, as stated by applicant.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (703) 305-8722. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda  
Patent Examiner  
Art Unit 2614

JS



**JOHN MILLER**  
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